Atty Dkt. No.: LIFE-030 USSN: 09/988,495

# **REMARKS**

## FORMAL MATTERS:

Claims 1-29 were examined. Claims 1, 3, 4, 9-11, 17-20 and 23-29 were rejected. Claims 2, 5-8, 12-16, 21 and 22 were objected to. Claims 2, 5-8, 12-16 and 18-24 were indicated to be allowable. Applicant thanks the Examiner for this indication of allowability.

Claims 1, 4-7, 9-23 and 25-51 are pending after entry of the amendments set forth herein.

By this amendment, claims 2, 3, 8 and 24 have been cancelled without prejudice to renewal, claims 1, 4-7, 9-11, 13, 15, 17-23 and 25 have been amended, and new claims 30-51 have been added. Also by this Amendment, paragraphs 0052, 0056, 0057, 0058, 0064, 0065 and 0072 have been amended in order to clarify the description of the invention and to correct for typographical errors. Additionally, Fig. 3 has been amended to add descriptors to a couple of the circuit components.

Support for the amendments to the specification and drawings and for the amendments and additions to the claims is found throughout the specification, the originally filed drawings and the originally filed claims. With respect to the addition of a first sentence to paragraph 0056, support is found in original claim 7. Accordingly, no new subject matter has been added.

#### **OBJECTIONS TO THE CLAIMS**

In the Office Action, claims 9, 10 and 18 were objected to for specific informalities. Applicant has amended these claims to correct for the informalities. Applicant thanks the Examiner for pointing them out.

# REJECTIONS UNDER §112, ¶2

In the Office Action, claims 6, 13, 14, 17-20 and 23-27 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicant believes the amendments to these claims address each of the points of rejection delineated by the Examiner. Accordingly, withdrawal of the rejections are respectfully requested.

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# REJECTIONS UNDER §102

Claims 1 and 3 were rejected under 35 U.S.C. §102(b) as being anticipated by Garnham et al. (WO 97/39343 A1) and Newman (WO 87/03095) respectively.

As claim 1 has been amended to include the limitation of allowable claim 2, and as claim 3 has been cancelled, these rejections have been made mute. Withdrawal of the rejections and allowance of the claims are respectfully requested.

## **REJECTIONS UNDER §103**

Claims 25-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Garnham et al. in view of Douglas et al. (U.S.P.N. 6,544,475) and, in the alternative, over Newman et al. in view of Douglas et al.

As claims 25-27 include the limitations of now allowable claim 1, for at least the reason presented above, these rejections have been made mute. Withdrawal of the rejections and allowance of the claims are respectfully requested.

#### REJECTIONS UNDER OBVIOUSNESS-TYPE DOUBLE PATENTING

Claims 1, 3, 4, 9, 10 and 11 were each provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over a claim (1, 5, 6, 2, 5 and 6, respectively) of copending U.S. Patent Application Serial No. 10/020,169.

As claim 1 has been amended to include the limitation of allowable claim 2, as claim 3 has been cancelled, and as amended claim 4 is now dependent upon allowable amended claim 1, this rejection as to those claims has been made mute for at least this reason. Applicant respectfully disagrees with the basis for the rejection of claims 9, 10 and 11. As stated by the Examiner on page 19 of the Office Action, paragraph (i), the claims of the cited copending application require application of an AC voltage to the electrochemical cell, not a DC voltage as required by claims 9, 10 and 11 of the present application. Accordingly, withdrawal of the rejections and allowance of the claims are respectfully requested.

Claims 25-29 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over a claim (1, 1, 1, 2 and 2, respectively) of copending U.S. Patent Application Serial No. 10/020,169.

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As claims 25-27 include the limitations of claim 1, for at least the reason presented above, the rejection with respect to these claims has been made mute. As claims 28 and 29 incorporate the limitations of claim 9, for at least the reason presented immediately above, Applicant respectfully disagrees with the basis of this rejection of claims 28 and 29.

Accordingly, withdrawal of the rejections and allowance of the claims are respectfully requested.

#### **NEWLY ADDED CLAIMS**

Newly added claims 30-33 are dependent upon allowable amended claim 1. Accordingly, for at least this reason, claims 30-33 are allowable and indication of such is respectfully requested.

Newly added claim 34 is dependent upon claim 11 which was provisionally rejected for obviousness-type double patenting which has been traversed above. Accordingly, for at least the reasons presented above, claim 34 is allowable and indication of such is respectfully requested.

Newly added claim 35 is dependent upon claim 16 which was indicated in the Office Action to be allowable. Accordingly, claim 35 is allowable and indication of such is respectfully requested.

Newly added claims 36-42 are directed to an electronic circuit configured to be electrically coupled to an electrochemical cell configured for receiving a biological sample, the circuit comprising means for applying a DC voltage to the cell wherein, upon application of a DC voltage, the cell generates a capacitance; means for receiving a voltage signal produced by said electrochemical cell; and means for converting the voltage signal to an oscillating voltage signal proportional to the capacitance of the cell.

As stated by the Examiner in the Office Action on page 18, paragraph (g), neither Garnham nor Newman disclose applying a direct current voltage to the cell/biosensor. Additionally, as stated by the Examiner in the Office Action on page 19, paragraph (i), the claims of the cited copending application do not require application of a DC voltage to the cell/biosensor. Accordingly, these newly added claims are not anticipated by nor made obvious by any of the cited references. An indication of allowance is respectfully requested.

Newly added claims 43-51 are directed to an electronic circuit configured to be electrically coupled to an electrochemical cell for receiving a biological sample and having a capacitance created by said biological sample upon application of a voltage to the

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electrochemical cell. The circuit comprises an oscillation circuit configured to receive a voltage input signal resulting from the charging and discharging of the electrochemical cell and comprising a comparator circuit for converting the voltage input signal to an oscillating voltage output signal proportional to the capacitance of the cell.

Neither Garnham nor Newman disclose such a comparator circuit. Accordingly, these newly added claims are not anticipated by nor made obvious by any of the cited references. An indication of allowance is respectfully requested.

### Conclusion

Applicant submits that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-0815, order number LIFE-030.

> Respectfully submitted, **BOZICEVIC, FIELD & FRANCIS LLP**

Date: 5/20/04

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